

## Lesson At A Glance

<b>Length</b>	30 minutes
<b>Learning Objectives</b>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• demonstrate knowledge of proper back care through example and analysis of scenarios</li> </ul>
<b>Teaching Strategies</b>	<ul style="list-style-type: none"> <li>• in-class discussion</li> <li>• personal reflection</li> <li>• critical thinking</li> <li>• questioning</li> <li>• demonstration</li> </ul>
<b>Equipment/Instructional Aids</b>	<ul style="list-style-type: none"> <li>• Student Handouts (photocopy for class)</li> <li>• flipchart/whiteboard</li> </ul>
<b>Assessment Strategies</b>	<ul style="list-style-type: none"> <li>• observation</li> <li>• activity worksheet</li> </ul>

## Lesson Breakdown

5 min.	Introductory Activity - Back Injuries
10 min.	Learning Activity - Case Study
15 min.	Group Learning Activity - Proper Lifting Technique

## Purpose

This module is designed to introduce students to proper back care techniques and to develop the students' awareness of the Hazard Recognition model to prevent back injury.

## Learning Objectives

Students will be able to:

- demonstrate knowledge of proper back care through example and analysis of scenarios

## Duration

30 minutes

## Instructional Materials

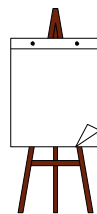
### Student Handouts

(photocopy for class)

1. Proper Lifting Techniques
2. Back Care Basics
3. WCB's Back Talk Booklet (optional)

### Equipment

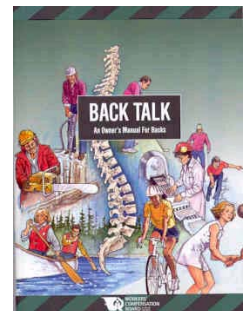
1. White board or flipchart and paper
2. Markers



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**Introduction - 5 min.**

**Ask**

Do you know of anyone who has a back problem?

What are their limitations?

**Suggested Response**

- discomfort
- pain
- limited activities
- medication
- depression



**Comment**

Back injuries are a major problem in the workplace. It is the second biggest reason for missed work, behind the common cold. In fact, eight out of ten people eventually suffer a back problem. That means you have an 80% chance of hurting your back unless you work smart!

**Ask**

What types of work situations or activities might cause back injury?

**Suggested Responses**

- lifting
- bending
- sitting
- loading
- twisting
- pulling



## Explain

### 1. Lifting Jobs

**Heavy lifting**, is **NOT** the primary cause of back injury. It is the daily wear and tear that weakens the spine, eventually setting the worker up for back injury.



### 2. Bending Jobs

Jobs that require constant or repeated **forward** bending end to over-stretch the muscles that protect the spine.



### 3. Sitting Jobs

Workers who must sit on their jobs actually have more back injuries than those who do lifting tasks.



## Comment

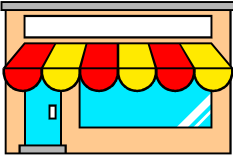
Some people think that back pain is just an excuse to get out of work. Many people do not accept back pain as a legitimate complaint ...until it is their turn to have back pain.

## Case Study - Class Learning Activity - 10 min.

## Discuss

Using the 'Jill' Back Care Case Study, discuss the nature of back injuries. Use 'Discussion Ideas' to develop the students attitude toward back safety.

**Class Learning Activity - continued**



**Back Care Case Study**

**Jill worked in a small cafe in Delta after school, on weekends and during the summer. Her job was to scoop ice cream to make cones, sundaes and milk shakes. After a year of working at her job, Jill noticed increased back aches and pains. Her family doctor told her the pains were caused by repetitive bending. He cautioned her that the pain could become chronic if something wasn't done.**



**Ideas for Discussion**

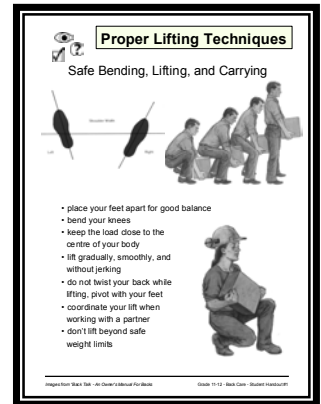
- Jill's job involves three risk factors (posture, force and repetition)
- the more risk factors that are involved, the larger the problem
- she must constantly bend her back in order to scope ice cream
- this motion also requires force, as the ice cream is difficult to scoop unless it is soft
- her injury could become chronic
- chronic injuries are difficult to treat
- solutions to this hazard will likely involve changes to the work itself
- the best solution will be to raise the ice cream buckets
- frequent rest breaks and more varied tasks may be necessary

### Proper Lifting Learning Activity - 15 min.

#### Comment

Regardless of how the job is designed, you must know how to use your body properly to do your job effectively.

#### Distribute Student Handout #1.



**Demonstrate** safe lifting techniques from Handout #1 and compare to unsafe methods.



**Ask** students to select an item from the classroom for demonstration purposes.

Have students practice safe lifting techniques below.

When you bend down to pick something up, follow these simple steps:

- place your feet apart for good balance bend your knees
- keep the load close to the centre of your body
- Lift gradually, smoothly, and without jerking
- do not twist your back while lifting, but pivot with your feet
- coordinate your lift when working with a partner
- don't lift beyond safe weight limits

### Proper Lifting Learning Activity - continued

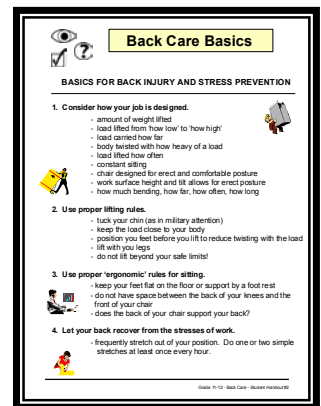
#### Comment

Your back is stressed most by bending, twisting, or loading. Loading includes lifting, pushing, pulling and carrying.

Injury occurs when the demands on the joints, discs, ligaments, and muscles trying to hold your spine together are too great.

**Distribute Student Handout #2.**

**Review** handout with class.



## Back Care Basics

### BASICS FOR BACK INJURY AND STRESS PREVENTION

#### 1. Consider how your job is designed.

- amount of weight lifted
- load lifted from 'how low' to 'how high'
- load carried how far
- body twisted with how heavy of a load
- load lifted how often
- constant sitting
- chair designed for erect and comfortable posture
- work surface height and tilt allows for erect posture
- how much bending, how far, how often, how long



**Proper Lifting Learning Activity - continued**

**2. Use proper lifting rules.**

- tuck your chin (as in military attention)
- keep the load close to your body
- position your feet before you lift to reduce twisting with the load
- lift with your legs
- do not lift beyond your safe limits!

**3. Use proper 'ergonomic' rules for sitting.**



- keep your feet flat on the floor or support by a foot rest
- do not have space between the back of your knees and the front of your chair
- does the back of your chair support your back?

**4. Let your back recover from the stresses of work.**



- frequently stretch out of your position. Do one or two simple stretches at least once every hour.

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Grade 11-12 - Back Care - Student Handout #2

**Conclude / Reflect**

There are three basic approaches to preventing back fatigue and injury on the job:

1. proper design of work tasks
2. the worker using his/her body properly to do the job.
3. the worker doing the right things to take care of his/her body

These three steps we have discussed during the lesson are easy to do....  
With the right attitude and concern for yourself.